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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,853	03/18/2004	John Montminy	K&S-S3P4	6546
24131	7590	04/04/2006	EXAMINER	
LERNER GREENBERG STEMER LLP			HOANG, TU BA	
P O BOX 2480			ART UNIT	
HOLLYWOOD, FL 33022-2480			PAPER NUMBER	
			2832	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,853

Applicant(s)

MONTMINY, JOHN

Examiner

Tu Ba Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Response to Arguments/Amendments

Applicant's arguments filed January 20, 2006 have been fully considered but they are not persuasive as for the following reason:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15 and 18-20 as amended are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is noted that the disclosure as its original filing does not provide any support for "substantially solid" as now recited in the claim. Furthermore, the original disclosure does not provide any support indicating that the protrusion is an "integral" protrusion as now recited in claim 1 (i.e., said pin body having an integral protrusion formed thereon for forming an abutment surface....).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 and 18-20 as amended are also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "substantially" in claims 1, 14 and 18 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is no way to measure how much would be considered substantially solid.

The disclosure is objected to because of the following informalities: on page 5, at line 4, the word "treaded" is misspelled. It should be "threaded" instead. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated Watson, Jr. et al (US 3,550,270). Watson, Jr. et al shows all features of the claimed invention (Figures 2-3) including a substantially solid thread pin of carbon material for connecting

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into a socket formed with an internal thread in a carbon electrode body 7, the pin comprising a pin body 4 having a central axis and a first and second end portions and an external thread, a protrusion or ring 1 forming an abutment surface extending radially beyond the external thread and facing toward one of the end portions, wherein the abutment surface forms part of the ring or flange or retaining nut 1 of graphite, polymeric material, or polyphenylenether that is integrally formed on the pin body 4.

Claims 1-5, 9, 14-15, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Paus (US 3,540,764). Paus shows all features of the claimed invention including an electrode assembly comprising two electrodes 10, 14 of carbon material, each formed with a respective socket having an internal thread and a bottom end, a substantially solid pin 12 of carbon material formed with an external thread and two end portions for connecting the two electrodes to form an electrode column, at least one of the electrodes and the pin each has an abutment surface configured to come into contact with the respectively other abutment surface when the pin is screwed into the socket, before the end portion of the pin reaches the bottom end of the socket, wherein the abutment surface of the pin is defined on a protrusion 18 of graphite formed on one of the two end portions with the protrusion 18 projecting radially beyond the external thread as shown in both Figures 1 and 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 8-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karagoz et al (US 4,513,425) in view of Paus (US 3,540,764). Karagoz et al shows all features of the claimed invention (Figure 2) including an electrode assembly comprising two electrodes of carbon material, each formed with a respective socket having an internal thread and a bottom end, a pin formed with an external thread and two end portions for connecting the two electrodes to form an electrode column, at least one of the electrodes and the pin each has an abutment

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surface (defined by the flange 68) configured to come into contact with the respectively other abutment surface when the pin is screwed into the socket, before the end portion of the pin reaches the bottom end of the socket, wherein the abutment surface of the pin is defined on a protrusion or flange 68 formed on one of the two end portions with the protrusion or flange 68 projecting radially beyond the external thread as shown in both Figures 2 and 3A. Karagoz et al fails to show the pin is made of carbon material. The uses of carbon or graphite nipples or pins are old and wellknown in the art, as evidence, Paus shows an electrode assembly comprising two electrodes 10,14 of carbon material, each formed with a respective socket having an internal thread and a bottom end connected together by a substantially solid pin 12 of carbon material (or nipple 50 noted in example 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the pin of Karagoz et al with the carbon nipple taught by Paus in order to greatly increase electrical conductivity as well as the thermal stress resistance at the joint (see Paus abstract).

REMARK

In response to applicant argument that Karagoz reference does not disclose the nipple is of carbon material. The examiner agrees and such rejection of the claim under USC 102 over Karagoz reference has been withdrawn. However, in lieu of the amendment, the claims are now rejected under 35USC 103 as noted above.

Similarly, as the claim now amended, the rejection of the claim over the Hopkins reference has been withdrawn as the pin of the reference is not of carbon material but metal.

In response to applicant argument that in Paus reference, the graphite material does not contact the nipple (12) and a portion of the lower electrode section (10) is provided between the graphite material (16) and the nipple (12) while in the claim, the abutment surface of the pin being defined on a protrusion formed on the end portion and the reference does not show the abutment surface of the pin being defined on a protrusion formed on the end portion (emphasis added). The examiner's position is that while it is agreed what Paus disclosed but not what the claims (i.e., at least claims 1, 14, and 18) called for. For example, it is noted that claim 1 is clearly called for "a pin body having an integral protrusion formed thereon for forming an abutment surface extending radially beyond the external thread...", therefore, the reference does show the abutment surface of the pin being defined on a protrusion formed on the end portion as recited in claims 1, 14 and 18. The issue of whether the expanded material that does or does not contact the nipple is irrelevant as the claim does not call for the nipple having the abutment surface but instead, the protrusion had. Inasmuch, the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Similarly, in response to Applicant's argument with respect to the rejection of the claim over the Watson reference, the Applicant states that the reference does not show the pin body having an integral protrusion formed thereon for forming an abutment surface and since the ring is removed after the nipple-electrode assembly is completed

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(emphasis added). The examiner disagrees since whether or not the ring is removed, at least at the time of assembly, it does form an integral protrusion and an abutment surface thereon and such descriptions are provided in great details set forth in the rejection above.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

As the claim amended, there are issue of new matters and the rejection is noted above.

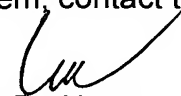
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-Thu from 8:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang
Primary Examiner
Art Unit 2832

March 29, 2006